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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,652	06/24/2003	Masatoshi Yokota	0754-0192P	1286
2292	7590	04/20/2006	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH			HUNTER, ALVIN A	
PO BOX 747			ART UNIT	
FALLS CHURCH, VA 22040-0747			PAPER NUMBER	

3711

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.		Applicant(s)	
	10/601,652		YOKOTA, MASATOSHI	
	Examiner		Art Unit	
	Alvin A. Hunter		3711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6,7 and 9-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6,7 and 9-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 6, 7, and 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herbert et al. (USPN 6132324) in view of Wu (USPN 5908358) further in view of Wu (6210294).

Herbert et al. discloses a golf ball having a cover comprising a thermoset urethane cover having a thickness of less than about 0.05 inches, or 1.27mm, and a Shore D hardness of about 30 to 60 (See Summary of the invention and Column 5, lines 3 through 39). Herbert et al. also discloses that the type of polyurethane is not limited to that disclosed therein. Wu '358 discloses a thermosetting urethane golf ball cover wherein the thermosetting urethane resin composition comprises an isocyanate group-terminated urethane prepolymer and a polyamine compound covering a core having a Young's modulus, also known as modulus of elasticity or stiffness modulus, from about 5000 to 100000 psi, or 34.5 to 689.5 MPa (See claim 1 of Wu '358). In table 1, Wu '358 shows examples of golf balls in which bear the cover of the present invention wherein it is shown that the covers have a hardness of 51 to 58 Shore D. From the above, a modulus of at least 102 to 116 MPa would satisfy the applicant's criteria, and therefore, would anticipate the above claims. Wu '358 discloses that the types of polyurethane that

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may be used are of thermoplastic and thermoset type in which examples of how those types are made. One having ordinary skill in the art would have found it obvious to incorporate the polyurethane of Wu'358 into the golf ball taught by Herbert et al. in order to improve shear resistance. Wu '358 does not limit the polyurethane to having the types of isocyanates disclosed. Wu '358 also established that alicyclic isocyanates, which inherently has color stabilizing characteristics, could also be used to produce thermoset polyurethane (See Column 5, lines 39 through 50). Wu '294 discloses a polyurethane composition have dicyclohexylmethane diisocyanates and isophorone diisocyanate (See Summary of the invention). One having ordinary skill in the art would have found it obvious to use the above isocyanates within Wu '358 in order to increase the initial velocity of the golf ball.

Response to Arguments

Applicant's arguments with respect to claims 1, 2, 4, 6, 7, and 9-16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin A. Hunter whose telephone number is (571) 272-4411. The examiner can normally be reached on Monday through Friday from 7:30AM to 4:00PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Kim, can be reached on 571-272-4463. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alvin A. Hunter, Jr.



EUGENE KIM
SUPERVISORY PATENT EXAMINER